

**ABSTRACT**

The present invention relates to a bipolar transistor of NPN type implemented in an epitaxial layer within a window defined in a thick oxide layer, including an opening formed substantially at the center of the window, this opening penetrating into the epitaxial layer  
5 down to a depth of at least the order of magnitude of the thick oxide layer, an N-type doped region at the bottom of the opening, a first P-type doped region at the bottom of the opening, a second lightly-doped P-type region on the sides of the opening, and a third highly-doped P-type region in the vicinity of the upper part of the opening, the three P-type regions being contiguous and forming the base of the transistor.